

The smaller specimen, measuring 20 mm. in length, is, when seen from above (Pl. XXXIII. fig. 8), less elongated posteriorly; the anterior extremity, when seen in profile, is more abruptly rounded (Pl. XXXIII. fig. 10; Pl. XXXIII.^a fig. 9); the peripetalous fasciole is broader (Pl. XXXIII.^a fig. 10); the posterior extremity turns upwards, and the spines covering the test are comparatively smaller and more distant; the test is also somewhat more flattened on the actinal side, as shown from the end view (Pl. XXXIII. fig. 11), and from the sloping anterior part of the test (Pl. XXXIII.^a fig. 9).

The primary tuberculation of the actinal side (Pl. XXXIII.^a fig. 8) is much coarser than that of the sides of the test (Pl. XXXIII.^a fig. 9), and both in *Aërope* and *Aceste* we find the proportions between the size of the ambulacral and interambulacral coronal plates corresponding more with that of the normal *Spatangina*.

From the great elongation of the posterior part of the test, the lateral posterior interambulacral, and ambulacral plates near the ambitus are greatly extended. The apical system is compact, the madreporic body occupying the greater part of the inner edges of the anterior genital plates and of the eight posterior plates; the ocular plates are small, and completely disconnected by the four adjoining genital plates which occupy the structural apex.

The anal system is elliptical, slightly pointed (Pl. XXXIII.^a fig. 12); the anal opening is surrounded by elongated mobile plates, while the rest of the anal system is covered by smaller plates of a uniform size arranged in three concentric rows. The difference of level between the actinal plastron and the anterior part of the test when seen in profile (Pl. XXXIII.^a fig. 9) seems to be the first indication of the formation of the prominent labium of the true *Spatangina*. If in *Aërope* the keel of the actinal plastron (Pl. XXXIII.^a fig. 8) was more decidedly indicated, we should have a well-marked lip changing the circular actinostome of the genus into a labiate one.

This change is well shown in *Aceste*, in which the actinostome, while practically circular (Pl. XXXIII.^a figs. 5, 6), yet has a well-marked labiate actinostome (Pl. XXXIII.^a figs. 2, 3), owing to the great development of the keeled actinal plastron and the projection of the last plate adjoining the actinostome beyond its general outline (Pl. XXXIII.^a figs. 2, 3).

Station 191. September 23, 1874. Lat. 5° 41' S.; long. 134° 4' E.; 800 fathoms; bottom temperature, 3·9° C.; mud.

Bay of Biscay and Coast of Portugal; December 1872 and January 1873.